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09/805,959	03/14/2001	Paul R. Sprehe	B-70072	3694

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EXAMINER

HARBECK, TIMOTHY M

ART UNIT PAPER NUMBER

3628

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/805,959

**Applicant(s)**

SPREHE, PAUL R.

**Examiner**

Timothy M. Harbeck

**Art Unit**

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/05/2001  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-17 are rejected under 35 USC 101 as the claimed invention is directed to non-statutory subject matter. For a claim to be statutory under 35 USC 101 the following two conditions must be met:

1) In the claim, the practical application of an algorithm or idea results in a useful, concrete, tangible result,

AND

2) The claim provides a limitation in the technological arts that enables a useful, concrete, tangible result.

As to the technology requirement, note MPEP Section IV 2(b). Also note *In re Waldbaum*, 173USPQ 430 (CCPA 1972) which teaches "useful ads" is synonymous with "technological arts". In *Musgrave*, 167USPQ 280 (CCPA 1970), *In re Johnston*, 183USPQ 172 (CCPA 1974), and *In re Toma*, 197USPQ 852 (CCPA 1978), all teach a technological requirement. The invention in the body of the claim must recite technology. If the invention in the body of the claim is not tied to technological ad, environment, or machine, the claim is not statutory. *Ex parte Bowman* 61USPQ2d 1665, 1671 (BD. Pat. App. & Inter. 2001) (Unpublished).

### ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Lof et al (hereinafter Lof, US Pat 6,671,585 B2) in view of Mistr, Jr (hereinafter Mister, US Pat 5,794,212).

**Re Claim 1:** Lof discloses a system, method and computer program product for enhancing commercial value of electrical power produced from a renewable energy power production facility. The Lof disclosure refers to electrical power and not natural gas however it was well known in the art at the time of invention that natural gas and electricity were common energy sources. The acquisition and purchase of both natural gas and electricity by a utility company from a producer are similar and therefore the system of Lof could easily be adapted for use with natural gas. Lof discloses a method wherein that comprises the steps of:

- Providing payment by an intermediary entity for said gas and taking title to said gas by said intermediary (Col 25, lines 57-66).
- Acquiring funds to pay for gas purchased by said intermediary entity by issuing debt instruments by said intermediary entity through financial markets (Col 25 line 62-Col 26 line 1)
- Collecting payments by said intermediary entity from said utility for gas delivered to utility customers in accordance with a sales contract between

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said utility and said intermediary entity and repaying debt instruments at maturities thereof by said intermediary entity from funds received from said utility pursuant to said sales contract (Col 26, lines 1-9).

Lof does not disclose negotiating at least one of the purchase, transport and storage cost of said gas by one of said utility and said intermediary entity or carrying out one of transporting said gas to a storage facility and identifying said gas at a predetermined storage facility. Mistr discloses a system and method for providing more efficient communications between energy (i.e. natural gas) suppliers, energy purchasers and transportation providers as necessary for an efficient and non-discriminatory energy market, that contains the features absent from the Lof disclosure.

Mistr discloses

- Negotiating at least one of the purchase, transport and storage cost of said gas by one of said utility and said intermediary entity (Col 3, lines 42-52)
- Carrying out one of transporting said gas to a storage facility and identifying said gas at a predetermined storage facility (Col 3 line 64-Col 4 line 4)

It would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Mistr to those of Lof because energy sources such as natural gas have become deregulated and a free market for these services is emerging. Negotiating the cost of purchase, transport and

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storage occurs for all products in a free marketplace, and absent any strict price regulations, the market for energy sources would operate in a similar manner.

Along those same lines, there must then be a way to determine ownership of the power source and the ability to store this power source for future use. If the supplier has purchased a lot of an energy source they will need access to at least as much as they have purchased because they will have promised their customers a certain amount that they must then provide.

**Re Claim 15:** Lof further discloses a method including the steps of monitoring pressures and fill quantities in said storage facility to determine storage facility performance and determining the extent of rollover of debt instruments as said debt instruments reach maturity based on said storage facility performance (Column 26, lines 14-28)

Claims 2, 3, 6, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of Mistr as applied to claim 1 above, and further in view of Takriti et al (hereinafter Takriti US Pat 5,974,403).

**Re Claim 2:** Lof in view of Mistr discloses the claimed method supra except for the explicit disclosure wherein assessing the risk of receiving payment from said utility by said intermediary entity based on selected parameters related to geographical territories serviced by said utility for the purchase of gas from said utility by customers of said utility within said territories. Takriti discloses a power trading and forecasting tool wherein computer implemented forecasting tools and, more particularly, to a tool for

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forecasting the spot-market prices of power and the trading transactions at different delivery points (Column 1, lines 18-21) which provides decision makers with probabilistic distributions so that they can manage risk efficiently. It would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Takriti to the disclosure of Lof in view of Mistr, because as the energy industry goes through deregulation, utilities need to prepare themselves for an open market in which buying and selling power are to be considered when scheduling their generating units, and forecasting demand for a product is a large part of this.

**Re Claim 3:** Takriti further discloses a method wherein said risk assessment includes a determination of selected parameters with a geographic territory (Column 2, lines 23-26), specifically regional weather conditions.

**Re Claim 6:** Takriti further discloses a method wherein said parameters are selected from a group consisting of historical heating/cooling degree days, present weather forecast, and historical weather by one of an hourly and daily basis within said territories, respectively (Column 2, lines 23-26).

**Re Claim 14:** Takriti further discloses determining the anticipated producing rate of gas for storage in said storage facility (Column 3, lines 35-39; level of generation needed) and Lof further discloses determining the dollar value of debt instruments available periodically based on said rate of production and delivery to storage (Column 25 line 66-Column 26 line 9).

**Re Claim 17:** Takriti further discloses acquiring data with respect to said utility related to historical daily temperatures in a service territory (Column 2, line 23-26)

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served by said utility to determine the parameters of expected placement of gas in storage and withdrawal of gas from storage and with drawl of gas from storage for said utility.

Claims 4, 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of Mistr in view of Takriti as applied to claim 3 above, and further in view of Sumic et al (hereinafter Sumic, US Pat 5,329,464).

**Re Claim 4:** Lof in view of Mistr in view of Takriti discloses the claimed method except for the explicit disclosure wherein said parameters are determined for subdivisions of said geographical territory defined by postal service code. Sumic discloses a utility layout design system wherein it is taught that many utilities have already implemented computer systems for storing and retrieving geographic data. Such systems are referred to as automated mapping and facilities management systems and typically reside within a geographic information system (GIS) as part of a database managed by a utility company (Column 2, lines 25-35). While Sumic does not explicitly disclose that the GIS is defined by postal service code, it could easily be adapted to do so using public knowledge of postal service codes. It would have been obvious to someone skilled in the ordinary art to include the teachings of Sumic to the disclosures of Lof/Mistr/Takriti so that a utility company could forecast risk associated with a specific area that they supply. It would be advantageous to do this, so that the utility company could set their service prices appropriately.



**Re Claim 5:** Sumic further discloses a method wherein said parameters are selected from a group consisting of residential housing units (Column 1, lines 15-16).

**Re Claim 7:** Takriti further discloses forecasting demand patterns (Fig 1A-B “load forecasts”) for gas to be withdrawn from storage and comparing said demand patterns with the capability of withdrawal of gas from said storage facility by a facility operator (Column 3, lines 30-34 and Table 1).

**Re Claim 8:** Mistr further discloses notifying said facility operator of requirements to release gas (movement of energy) from storage in accordance with a schedule (Column 3, lines 41-52).

**Re Claim 9:** Takriti further discloses forecasting expected cash flows from customers serviced by said utility in said territories (Column 3, lines 38-40).

**Re Claim 10:** Lof further discloses determining the requirements for one of issuance and re-issuance of debt instruments and at least one of monetary amounts thereof and maturity dates thereof and issuing debt instruments as required to finance the purchase of said gas by said intermediary entity and corresponding to expected cash flows to said intermediary entity from said utility (Column 25 line 57- Column 26 lines 13).

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of Mistr as applied to claim 1 above, and further in view of Mandler et al (hereinafter Mandler US Pat 5,732,400).

**Re Claim 11:** Lof in view of Mistr discloses the claimed method except for the explicit disclosure wherein determining an interest rate to be one of charged to said

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utility and paid on said debt instruments by assessing risks of loss by said intermediary entity, said risks of loss selected from a group consisting of interest rate risk, default on repayment of said debt instruments risk, maturity schedule of debt instruments risk, gas measurement risk, physical loss of said gas during transmission and in storage risk, business conditions risk and economic risk. Mandler discloses a system and method for a risk based purchase of a good wherein a third party financial clearing house makes a dynamic real time risk classification of each buyer utilizing an online repository of credit data, including either in-house data or data obtained from a commercial credit service. The financial clearinghouse further determines a risk based discount rate (interest rate) as a function of the buyers risk classification. It would have been obvious to someone skilled in the ordinary art at the time of invention to include the teachings of Mandler to those of Lof in view of Mistr because in any financing deal, if the risk associated with a loan is greater, there must be a greater incentive to complete the deal. If there were more risk associated with a certain transaction, then one would expect to receive a greater return on their investment as compensation.

**Re Claim 12:** Mandler further discloses determining an interest rate to be charged to said utility based on one or more of said risks (Column 3, lines 43-46).

**Re Claim 13:** Mandler further discloses assigning a weighted value to selected ones of said risks and determining a composite risk value (Column 3, lines 43-46; a risk based discount rate as a function of the buyers risk classification).

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lof in view of Mistr as applied to claim 1 above, and further in view of Land et al (hereinafter Land US Pat 6,807,533 B1).

**Re Claim 16:** Lof in view of Mistr discloses the claimed method except for the explicit disclosure including the step of monitoring the aging of accounts receivable of said utility to determine the risk associated with said intermediary entity achieving a predetermined return on investment. Land discloses a web based method and system for managing accounts receivables, that discloses the claimed features (See abstract). While Land does not specifically state that the monitoring of accounts receivables is used to determine risk in investing, it is notoriously well known in the art that accounts receivable data is used in evaluating risk, specifically to determine a company's ability to collect funds that are owed to them.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy M. Harbeck whose telephone number is 571-272-8123. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S. Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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